

CLAIMS

Now, therefore, we claim:

1. A method for configuring solid-state storage devices, comprising:
providing a solid-state storage device;
analyzing an error rate of said solid-state storage device; and
selecting, based on said error rate, an error correction code power level to
provide said solid-state storage device with a pre-determined error rate.
2. The method of claim 1, wherein analyzing error rate of said solid-state
storage device further comprises:
testing said solid-state storage device for defects;
determining said error rate of said solid-state storage device based on said
testing; and
comparing said error rate of said solid-state storage device to said pre-
determined error rate.
3. The method of claim 2, wherein said testing further comprises performing
a write-read-compare operation on at least one selected cell.
4. The method of claim 1, further comprising analyzing an intended user
application of said solid-state storage device, wherein said selecting is further based
on said intended user application.
5. The method of claim 1, wherein said selecting further comprises
switching a selector lever to select a desired error correction code.
6. The method of claim 1, wherein said solid-state storage device comprises
a plurality of magnetoresistive storage cells.
7. The method of claim 1, further comprising determining a rate of
deterioration of said storage device, wherein said selecting is further based on said
rate of deterioration.

8. A method for configuring solid-state storage devices, comprising:
determining a value indicative of an error rate for a solid-state storage device;
selecting a set of error correction code based on said value; and
installing said selected set of error correction code in said solid-state storage device.

9. The method of claim 8, wherein said selecting is further based on an intended application for said solid-state storage device.

10. The method of claim 8, further comprising comparing said value to a pre-determined threshold, wherein said selecting is based on said comparing.

11. The method of claim 8, further comprising:
determining a value indicative of a rate of deterioration of said storage device;
and
comparing, to a threshold, said value indicative of said rate of deterioration, wherein said selecting is based on said comparing.

12. A system for configuring solid-state storage devices, comprising:
a solid-state storage device; and
an error correction code (ECC) selection system configured to automatically select a set of error correction code based on an error rate of said storage device, said ECC selection system further configured to install said selected set of error correction code in said solid-state storage device.

13. The system of claim 12, wherein said ECC selection system is further configured to receive information indicative of an intended application for said storage device and to select said set of error correction code based on said information.

14. The system of claim 12, wherein said ECC selection system is configured to determine a value indicative of said error rate and to compare said value to a pre-determined threshold.

15. The system of claim 12, wherein said ECC selection system is configured to select said set of error correction code based on a rate of deterioration of said storage device.

16. A computer-readable medium having an error correction code selection system for use with a solid-state storage device, said computer-readable medium comprising:

logic configured to receive information corresponding to said solid-state storage device;

logic configured to analyze said information corresponding to said solid-state storage device; and

logic configured to select a set of error correction code for use with said solid-state storage device based on said information received corresponding to said solid-state storage device.

17. The computer-readable medium of claim 16, wherein said information is indicative of an error rate for said storage device.

18. The computer-readable medium of claim 17, wherein said information is further indicative of an intended application for said storage device.

19. The computer-readable medium of claim 18, wherein said information is further indicative of a rate of deterioration for said storage device.

20. A system for configuring solid-state storage devices, comprising:
means for testing a solid-state storage device and for determining a value indicative of an error rate for said storage device;
means for comparing said value to a pre-determined threshold;
means for selecting a set of error correction code based on said comparing means; and
means for installing said selected set of error correction code in said storage device.

21. The system of claim 20, wherein said selecting means is further configured to select said error correction code based on an intended application for said storage device.

22. The system of claim 20, wherein said selecting means is further configured to select said error correction code based on a rate of deterioration for said storage device.